

WHAT IS CLAIMED IS:

- 1 *Fig. 1B* 1. A method for cultivation of graftable skin comprising:
2 growing a layer of dermal fibroblasts upon at least an upper side of a
3 biosynthetic substratum of a derivative of benzyl esterified hyaluronic acid, and, after
4 said dermal fibroblast layer becomes at least sub-confluent,
5 growing a layer of keratinocytes over said dermal fibroblasts upon said
6 upper side of said substratum to form a composite skin graft material, said keratinocytes
7 being harvested from a target donor patient.
- 1 2. The method according to claim 1 wherein said dermal fibroblasts
2 are allogenic. *to which*
- 1 3. The method according to claim 1 wherein said dermal fibroblasts
2 are autologous.
- 1 *Fig. 1B* 4. A method for cultivation of graftable skin comprising:
2 growing a first layer of dermal fibroblasts upon a first basal side of a
3 biosynthetic substratum of a derivative of benzyl esterified hyaluronic acid;
4 growing second layer of dermal fibroblasts upon a second upper side of
5 said biosynthetic substratum; and
6 after said second dermal fibroblast layer becomes at least sub-confluent,
7 growing a layer of keratinocytes over said dermal fibroblasts upon said upper side of said
8 substratum to form a composite skin material, said keratinocytes having been harvested
9 from a target donor patient.
- 1 5. The method according to claim 4 wherein said dermal fibroblasts
2 are allogenic.
- 1 6. The method according to claim 4 wherein said dermal fibroblasts
2 are autologous.
- 1 *Fig. 1C* 7. A method for cultivation of graftable skin comprising:
2 growing a layer of keratinocytes upon an upper side of a substratum of a
3 biosynthetic substratum of a derivative of benzyl esterified hyaluronic acid to form a

4 composite skin graft material, said keratinocytes having been harvested from a target
5 donor patient.

1 8. A graftable skin material comprising a composite of:
2 F.G. 1B a biosynthetic substratum of a derivative of benzyl esterified hyaluronic
3 acid;
4 a layer of dermal fibroblasts upon at least an upper side of said
5 biosynthetic substratum; and
6 a layer of keratinocytes over said dermal fibroblasts upon said upper side
7 of said substratum, said keratinocytes having been harvested from a target donor patient.

1 9. The material according to claim 8 wherein said dermal fibroblasts
2 are allogenic.

1 10. The material according to claim 8 wherein said dermal fibroblasts
2 are autologous.

1 11. A graftable skin material comprising a composite of:
2 F.G. 1A a biosynthetic substratum of a derivative of benzyl esterified hyaluronic
3 acid;
4 a first layer of dermal fibroblasts upon a first basal side of said
5 biosynthetic substratum;
6 a second layer of dermal fibroblasts upon a second upper side of said
7 biosynthetic substratum; and
8 a layer of keratinocytes over said dermal fibroblasts upon said upper side
9 of said substratum, said keratinocytes having been harvested from a target donor patient.

1 12. The material according to claim 11 wherein said dermal fibroblasts
2 are allogenic.

1 13. The material according to claim 11 wherein said dermal fibroblasts
2 are autologous.

1 14. A graftable skin material comprising:
2 F.G. 1C a substratum of a biosynthetic substratum of a derivative of benzyl
3 esterified hyaluronic acid; and

4 a layer of keratinocytes upon an upper side of said substratum, said
5 keratinocytes having been harvested from a target donor patient.

1 15. A method for grafting a graftable skin material comprising the
2 steps of:

3 applying an artificial skin substrate upon a wound bed of a recipient
4 patient; said artificial skin substrate comprising a layer of collagen-glycoaminoglycan on
5 a basal side to be juxtaposed to said wound bed and a covering membrane of silicone on
6 an opposing upper side;

7 allowing a sufficient time to form a vascularized wound bed under said
8 collagen-glycoaminoglycan; thereupon

9 removing said silicone membrane; and thereupon

10 applying a basal side of a sheet of cultivated skin material over said
11 collagen- glycoaminoglycan, said cultivated skin material comprising at least a layer of
12 keratinocytes upon an upper side of a substratum, said keratinocytes being harvested from
13 a target donor patient.

1 16. The method according to claim 15 wherein said cultivated skin
2 material further comprises a layer of dermal fibroblasts upon at least an upper side of a
3 biosynthetic substratum and wherein said layer of keratinocytes is over said dermal
4 fibroblasts.

1 17. The method according to claim 16 wherein said cultivated skin
2 material further comprises a layer of dermal fibroblasts upon said basal side of said
3 biosynthetic substratum.